



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

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Governor

MAEVE VALLELY BARTLETT
Secretary

DAVID W. CASH
Commissioner

Robert Delhome
Charter Environmental, Inc.
560 Harrison Avenue
Boston, MA 02118

RE: CHELMSFORD—Solid Waste Management/COR
Glenview Landfill
Stedman Street
FMF Number: 296976

BWP SW25/Corrective Action Design
Transmittal Number: X260852

Landfill Closure

Provisional Decision – Provisional Approval

Dear Mr. Delhome:

The Massachusetts Department of Environmental Protection, Northeast Regional Office, Bureau of Waste Prevention, Solid Waste Management Section ("MassDEP") has reviewed your application for the Corrective Action Design (*the "CAD"*), at the Glenview Landfill located off Stedman Street in Chelmsford, Massachusetts (the "Landfill"). Langdon Environmental, LLC of Marlborough, Massachusetts ("Langdon") prepared and submitted the application, category *BWP SW 25, Permit for Corrective Action Design* Transmittal No. X260852, to MassDEP on behalf of Charter Environmental, Inc. ("Charter"). MassDEP received the application on June 3, 2014.

Your application has been assigned File Number X260852. In accordance with 310 CMR 19.031 (1) this File Number must be referred to on all future correspondence regarding this application.

DISCUSSION

Background

Charter is under agreement with the landowner, Sandbanks, LLC, to complete the final closure of the Glenview Landfill and other associated activities in accordance with the Solid Waste Management Regulations, 310 CMR 19.000. As owner of the Landfill, Sandbanks, LLC retains ultimate responsibility for the closure and post closure monitoring and maintenance of the Landfill as well as addressing the impact of cyanide contamination on the groundwater at the site.

The corrective action work is being completed subject to two Administrative Consent Orders (ACO's) with MassDEP as follows:

- ACO-NE-14-4002 (the "Charter ACO") between Charter and MassDEP with an effective date of March 21, 2014, and
- ACO-NE-14-4001 between Sandbanks and MassDEP with an effective date of March 21, 2014.

The Charter ACO in part requires that Charter shall:

- Establish and maintain a Financial Assurance Mechanism ("FAM") in accordance with 310 CMR 19.051, in the amount of Two Million Nine Hundred Eighty-two Thousand Dollars (\$2,982,000) to assure completion of all the obligations of Charter's under the Charter ACO. Charter established and funded the required FAM on April 7, 2014; and
- Perform inspections of the site in accordance with Paragraphs 8.R, S, T, U, V and W of the Charter ACO. Copies of these conditions are contained in Attachment A to this decision.

On November 20, 2013, MassDEP approved Charter's conceptual plan (the "Conceptual Closure Plan") for the placement of approximately 420,000 cubic yards (cy) of additional grading and shaping materials to complete the final closure of the Landfill in accordance with the Massachusetts Solid Waste Regulations, 310 CMR 19.000.¹ Approved grading and shaping materials included: clean soils; soils meeting MassDEP's guidance "Reuse and Disposal of Contaminated Soils at Massachusetts Landfills", COMM-97-001, for unlined landfills; street sweepings; catch basin cleanings from storm water systems that are separated from sewers; and dewatered dredge materials for unlined landfills per MassDEP Policy 94-007.

The Conceptual Closure Plan also proposed that Charter be allowed to receive and stockpile approximately fifty thousand (50,000) cubic yards (cy) of shaping and grading

¹ Application category, BWP SW45 - Any Facility - Alternative Review, Transmittal No. X257263

soil pending MassDEP's approval of the revised CAD for completing closure of the Landfill. MassDEP's approval of the Conceptual Closure Plan required that Charter submit to MassDEP for review and approval a plan for the proposed interim stockpile of grading and shaping material at the Landfill, an application category BWP SW 11: *Landfills-Major Modification*.

On April 25, 2014, MassDEP approved Charter's Interim Stockpile Plan ("ISP") for the stockpiling of approximately 50,000 cubic yards ("cy") of grading and shaping materials and up to 10,000 cy of asphalt, brick and concrete ("ABC") materials for the construction of temporary roadways and vehicle turning areas on the Landfill footprint. This approval allowed Charter to bring these materials to the site prior to receiving final MassDEP approval of the revised CAD.

In addition, CDM Smith has submitted a Letter of Map Revision ("LOMR") application, I.D. No. R290635003734, to the Federal Emergency Management Agency ("FEMA") requesting a correction of the 100 year Flood Plain Boundary for Black Brook in the area of the Landfill shown on the 2010 Federal Flood Insurance Map (F.I.R.M). The 2010 F.I.R.M., I.D. No. 25017C0251E, in part, relocated the floodplain boundary from its previous location shown on the 1980 F.I.R.M to a portion of the Landfill plateau and eastern side slope.

The western edge of the floodplain boundary shown on both the 1980 and 2010 F.I.R.Ms runs from Route 3 to a point approximately 455 feet to the northeast on a line approximately parallel to and 100 feet southeast of the base of the Landfill slope. The 2010 F.I.R.M then depicts the 100 year flood plain boundary as turning 90 degrees to the base of the Landfill slope, from there to the southeast along the base of the slope, then rising 40 feet in elevation up the eastern side slope of the Landfill to and around an area of exposed flexible membrane liner ("FML") on the Landfill's plateau, then returning down the eastern side slope to the base of the Landfill to a location close to the flood plain boundary as shown on the 1980 F.I.R.M. This contrasts with the 1980 F.I.R.M that shows the 100 year flood plain proceeding to the northeast parallel to and approximately 100 feet southeast of the base of the Landfill's eastern side slope, between approximately the 110 and 120 foot contours.

Section 310 CMR 19.006 *Definitions* of the Massachusetts Solid Waste Regulations defines floodplain as:

"...an area which floods from a rise in a bordering waterway or waterbody and is the maximum lateral extent of flood water which will result from the statistical 100 year frequency storm. This boundary shall be determined using the data available through the National Flood Insurance Program (NFIP) as administered by the Federal Emergency Management Agency (FEMA), except where the Department determines that more accurate information is available."

Section 310 CMR 10.57(2) *Definitions, Critical Characteristics and Boundaries* of the Massachusetts Wetland Regulations defines Bordering Land Subject to Flooding as:

"...an area with low, flat topography adjacent to and inundated by flood waters rising from creeks, rivers, streams, ponds or lakes. It extends from the banks of these waterways and water bodies; where a bordering vegetated wetland occurs, it extends from said wetland."

The proposed interim stockpiling of shaping and grading material will occur within the area of the Landfill and outside of 100 year floodplain boundary as shown on the 1980 F.I.R.M and outside of the revised floodplain boundary as identified by CDMSmith in the LOMR filed with FEMA for the 2010 F.I.R.M.

Current Application:

As described in this CAD application Charter proposes to:

1. Install a final landfill cap on all areas where new grading and shaping materials are placed. The cap will consist of a 6-inch bedding layer, 40-mil thick textured high density polyethylene liner, 12-inch thick coarse sand drainage layer and 8-inch thick topsoil layer. The bedding layer may be coarse sand, select grading and shaping material or screened street sweepings.
2. A portion of the previously constructed landfill cap is proposed to be augmented to meet the requirements of MassDEP solid waste regulations. Charter will perform a detailed investigation to determine which portion of the existing landfill cap can be reused.
3. The proposed landfill cap will be extended to the limits of the previously approved abandoned landfill cap constructed by the prior operator of the site. The edge of the landfill cap correlates to the extent of grading and shaping materials historically placed at the Site.
4. Due to the nature of the materials previously placed at the site and the proposed grading and shaping materials that will be placed, no landfill gas venting or gas collection system is required. Neither a landfill gas venting or collection system was included in the previously approved corrective action for the Site.
5. The proposed CAD grading plans will accommodate approximately 420,000 cubic yards of grading and shaping materials to achieve the proposed subgrade elevations.

Access to the Site for trucks delivering grading and shaping material will be Route 3 to Drum Hill Road to Westford Street to the existing Site driveway. Exiting traffic will use the same route in the reverse direction to leave the Site.

MassDEP performed a review of the CAD permit application and in a letter dated June 25, 2014, requested additional information from Charter to complete MassDEP's review. Langdon on behalf of Charter in letters dated July 10 and 30, 2014 provided satisfactory responses to the request for additional information.

PROVISIONAL DECISION

MassDEP has determined that the application as conditioned by this decision, complies with the requirements of 310 CMR 19.000 including, but not limited to, the requirements of 310 CMR 19.112 and 310 CMR 19.151, subject to the Applicant's compliance with the conditions of this decision. These conditions are imposed by MassDEP pursuant to 310 CMR 19.043(1) and 310 CMR 19.151(3)(a).

MassDEP is issuing this decision pursuant to 310 CMR 19.033(4)(a) as a Provisional Decision for the purpose of obtaining comment from the Applicant, the Town of Chelmsford, other interested parties, and the public on the proposed decision. Comments on the Provisional Decision must be received by MassDEP at the address below on or before 5 PM on August 25, 2014. Following the comment period and upon review of the comments received, if any, MassDEP expects to issue a final decision on the Application on or before September 15, 2014.

Comments must be received at the following address on or before 5 PM on August 25, 2014.

Massachusetts Department of Environmental Protection
Northeast Regional Office
Attention: John A. Carrigan, Chief Solid Waste Management Section
205B Lowell Street
Wilmington, Massachusetts 01987

Comments also may be submitted by email to Mr. Carrigan at the following email address John.Carrigan@state.ma.us on or before 5 PM on August 25, 2014. Please include the Application Transmittal No. X259883 and FMF No. 328983 with the comments.

CONDITIONS

1. **Effective Date:** [[DATE OF ISSUANCE]]. This permit and ATC is effective upon the date stamped on page one of this permit unless the effective date is extended by MassDEP or a court of competent jurisdiction pursuant to Section IX. of this permit.
2. **Site Preparation:** Prior to the initiation of placement of grading and shaping materials outside of the previously approved Stockpile Area, Charter shall install the erosion control barriers as shown on CAD Plans, Sheet C-2 Site Preparation and Cap Repair Plan.
3. **Notification:** At least seven (7) days prior to the initiation of placement of grading and shaping material at the Site outside of the previously approved Stockpile Area, Charter

shall notify MassDEP, the Town of Chelmsford, and the City of Lowell of the date that the placement of additional shaping and grading materials will begin.

4. **Acceptable Grading & Shaping Materials:** The following grading and shaping materials are approved for use in this project: clean soils; soils meeting the guidelines established in MassDEP's policy COMM-97-001: *"Reuse and Disposal of Contaminated Soils at Massachusetts Landfills,"*² for unlined landfills; street sweepings; catch basin cleanings from storm water systems that are separated from sewers; and dewatered dredge materials for unlined landfills per MassDEP Policy 94-007.³

5. **Material Tracking:** The transportation of all grading and shaping materials to the Site shall be conducted in accordance with the Material Shipping Record (MSR) procedures described in either the COMM-97-001 or COMM-94-007 policies; or the Bill of Lading (BOL) provisions of 310 CMR 40.0030, as applicable.

6. **Confirmatory Sampling:** In addition to the laboratory testing to be performed by the source sites prior to delivery to the Landfill, the following two sets of confirmatory sampling and laboratory analysis shall be performed during acceptance of grading and shaping materials during the stockpiling operations:

- a. If a load(s) enters the Landfill that is either visually different than other loads from the same source site; exhibits a strong odor or free liquids, or has a significant amount of solid waste, Charter shall segregate that load (and any subsequent loads with similar issues from the same source site) from the stockpile operations and collect a sample for laboratory analysis. This procedure shall apply to all grading and shaping materials that are accepted at the Landfill.
- b. Charter shall arrange for the Engineer of Record⁴ for the project to collect and submit for laboratory analysis random samples of incoming grading and shaping material from randomly selected loads being delivered at the Landfill. The random samples shall be collected at a frequency of three (3) samples per calendar quarter (that is per three months). The load that a random sample is collected from shall be segregated from the ongoing operations until the results from the laboratory analysis are available.

7. **Site Maintenance:** Maintenance of side slopes, berm(s), drainage swales, stormwater systems, outlet structures, and appurtenances shall be performed to keep these structures in good working order. The area around the Site entrance shall be maintained in a condition which shall prevent tracking of sediment onto the public right-of-way. All sediment spilled, dropped, washed or tracked onto the public right-of-way shall be removed without delay.

² For contaminants for which acceptance criteria are not identified in COMM-97-001 or COMM-94-007 Charter may use the RCS-2 notification criteria identified in 310 CMR 40.0000 as the acceptance criteria.

³ Charter may seek approval from MassDEP to utilize additional materials such as coal ash or previously approved BUD materials for shaping and grading of the Landfill. BUD materials are materials approved pursuant to 310 CMR 19.060, *"Beneficial Use of Solid Waste"*, for reuse as shaping and grading material in construction of the subgrade for a landfill cap.

⁴ Engineer of Record or his/her direct employee or subordinate.

8. **Dust Control:** Charter shall also implement all measures necessary to control and prevent the generation and emission of dust wherever and whenever necessary at the Landfill, the access road, and any other areas related to or under control of Charter to prevent fugitive dust emissions and/or the occurrence of nuisance conditions. Water shall not be used for dust control in amounts that produce excessive infiltration, ponding, runoff or erosion.
9. **Compliance:** The Department reserves the right, in accordance with 310 CMR 19.000, to amend, modify, suspend or revoke this approval as necessary to protect the public health, safety or the environment, or as otherwise necessary to insure compliance with law and/or regulation, as amended.
10. **Permit Modification:** No changes, modifications or alterations shall be made to the approved plans, unless otherwise approved, in writing, by the Department in accordance with 310 CMR 19.000.
11. **Standard Conditions:** Charter shall comply with the requirements established at 310 CMR 19.000 including, but not limited to, the provisions established at 310 CMR 19.043(5), "Standard Conditions" of the Massachusetts Solid Waste Regulations.
12. **Existing Landfill Cap Augmentation:** Charter shall perform a detailed investigation of the portion of the existing landfill cap that Charter proposes to augment to comply with MassDEP Solid Waste Regulations. This information shall be submitted to MassDEP on or before January 15, 2015 as an application category BWP SW 45 "Alternative Review Process for Certain Modifications of a Solid Waste Management Facility" pursuant to 310 CMR 4.00 "Timely Action Schedule and Fee Provisions" and subject to the requirements of Paragraph 17. Submittals, below. If MassDEP determines that the proposed modification to the Corrective Action Design constitutes a significant change to the approved design then MassDEP may, at its sole discretion, require that the proposed changes be submitted as a category BWP SW11, "Major Modification of a Landfill" or a category BWP SW22, "Minor Modification of a Landfill" application.
13. **Instruction of Contractors and Employees:** The Permittee shall instruct all contractors and employees in the requirements of this decision and permit, as applicable to their work; and Charter Permittee shall maintain and make available at the Property a copy of this permit and all approved plans, appendices, protocols and attachments for use by Charter's contractors and employees. Charter shall maintain records at the Site documenting that all contractors and employees have been instructed pursuant to this paragraph.
14. **Closure Certification:** As required by the Consent Order no later than ninety (90) days after the date of completion of the construction of the landfill cap, the Charter shall submit to the MassDEP, an "as built" plan, prepared by a Massachusetts Registered Professional Engineer. The "as built" plan shall include a report, prepared by the Massachusetts Registered Professional Engineer of record, providing all applicable quality control/ quality assurance data and certifying that the closure was completed in conformance with the approved plans and 310 CMR 19.000, including any modifications to those plans as may have been approved. "As built" plans shall include, but not be limited to, all existing

underground utilities, retained or abandoned. The Closure Certification shall be submitted as a category SW 43 Determination of Landfill Closure Completion application pursuant to the requirements of paragraph 17. Submittals, below.

15. **"Minimum" or "Maximum" Design Specifications:** Wherein the design specifications provide a standard as "minimum" or "maximum" (or other of similar effect) the closure certification shall document that **all** material accepted and placed for that use equals or exceeds the standard. Where materials are received that do not meet any standard the closure completion certification report shall clearly document either that the material was rejected and not used, or was modified or otherwise processed, so as to meet the standard as actually used. Wherein an area must be reworked, repaired or otherwise removed and replaced, confirmatory testing shall be completed and documented showing that the reworked, repaired and/or replaced materials meet specifications. The thickness of the soil layers shall include documentation by direct tabulated measurement that the layer meets the specifications. Testing results and measurements shall **not** be averaged to determine compliance with the specifications.

16. **Submittals: The submittals to MassDEP required by** this decision shall be submitted by the Charter in accordance with the applicable fee provisions of 310 CMR 4.00 *"Timely Action Schedule and Fee Provisions"*. In the event that the MassDEP provides written comments to Charter on documents submitted pursuant to this paragraph, Charter shall provide a response and revised document to the MassDEP within twenty-one (21) days of the date of the MassDEP's written comments that corrects any deficiencies reasonably identified by the MassDEP in the document(s)⁵ and; makes any changes that the MassDEP reasonably requires.

17. **Compliance with Other Regulations:** This decision does not relieve Charter of its obligation to comply with all applicable state, federal and local laws and regulations.

18. **Project Schedule:** For information purposes Charter shall submit to the MassDEP on or before October 15, 2014 a detailed project schedule that tracks material placement, closure construction, permit submittals and ACO related deadlines. Schedule shall be updated monthly and included with the monthly inspection report.

19. **Liability:** The Permit is issued subject to the conditions of joint and several liability in accordance with 310 CMR 19.034 (3).

20. **Post Closure Use:** Pursuant to 310 CMR 19.143(1) (a) any post closure use on the landfill will require written approval from MassDEP.

21. **Extension of Timelines:** Charter may request and MassDEP may, at its sole discretion, approve an extension of any timeline pursuant to this decision.

⁵ Such documents include but are not limited to Notice of Administrative or Technical Deficiency issued pursuant to 310 CMR 4.00.

NOTICE OF RIGHT TO APPEAL

Appeal. Any person aggrieved by the issuance of this decision, except as provided for under 310 CMR 19.033(4)(b), may file an appeal for judicial review of said decision in accordance with the provisions of M.G.L. c. 111, s. 150A, and M.G.L. c. 30A, not later than thirty (30) days following the date of receipt of the final decision. The standing of a person to file an appeal and the procedures for filing such appeal shall be governed by the provisions of M.G.L. c. 30A. Unless the person requesting an appeal requests and is granted a stay of the terms and conditions of the decision by a court of competent jurisdiction, the decision shall remain effective.

Notice of Action. Any aggrieved person intending to appeal this decision to the Superior Court shall first provide notice to the Department of their intention to commence such action. Said notice of intention shall include the Department file number and shall identify with particularity the issues and reasons why it is believed the decision was not proper. Such notice shall be provided to the Office of General Counsel of the Department and the Regional Director for the regional office which processed the application. The appropriate addresses to which to send such notices are:

General Counsel
Department of Environmental Protection
One Winter Street - 3rd Floor
Boston, MA 02108

Eric Worrall
Regional Director
Department of Environmental Protection
205b Lowell Street
Wilmington, MA 01887

No allegation shall be made in any judicial appeal of this decision unless the matter complained of was raised at the appropriate point in the administrative review procedures established in those regulations, provided that a matter may be raised upon a showing that it is material and that it was not reasonably possible with due diligence to have been raised during such procedures or that matter sought to be raised is of critical importance to the environmental impact of the permitted activity.

If you have any questions in regards to this matter please contact Richard Spieler at (978)694-3317.

DRAFT

Sincerely,
Richard J. Spieler

DRAFT

Sincerely,
John A. Carrigan

Environmental Engineer
Solid Waste Management Section

Section Chief
Solid Waste Management Section

JAC/RJS/rjs

cc:

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